

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): An opening-force-maximizing device of an underpressure-activated valve structured for connection to a drinking container—(2) having an outlet opening—(4), said device comprising:

a partition wall provided with a wall opening and structured to be able to cover and pressure-sealingly enclose the outlet opening in the drinking container;

a peripherally continuous membrane positioned at an outside of the partition wall and subjected to ambient pressure, the membrane being arranged about a valve axis through the wall opening in the partition wall, the valve axis defining the axial direction of the underpressure-activated valve; and

an axially movable valve sealing member connected to the membrane and provided with a valve head positioned upstream of the wall opening for the opening and closing thereof;

- wherein an upstream side of the partition wall is provided with a valve seat formed around the wall opening for pressure-sealing and valve-closing contact with said valve head when the membrane is in an inactive position;

- wherein the membrane has an axial extent so as to form a sleeve-like body having two axial termination ends represented by an attachment end and a maneuvering end;

- wherein the attachment end is fixedly connected to the partition wall at a peripheral rim thereof;

- wherein the movable maneuvering end is positioned at an axial distance from the attachment end and is connected in a tensile-force-transmitting manner to the valve sealing member;

- wherein one side of the membrane is structured for receiving an underpressure which, together with said ambient pressure, creates a differential pressure across the membrane~~the container (2) being pressure balanced against an ambient pressure (P1)~~

~~when in position of use, in which position the device is connected to the container (2) and includes a partition wall (6, 106, 206) covering and pressure-sealingly enclosing the outlet opening (4) and being provided with a wall opening (8, 108, 208), the upstream side of which is in pressure-sealing contact with an axially movable valve-sealing member (22, 122, 222) being in position of rest, and the device also including a peripherally continuous membrane (12, 112, 212) being pressure-balanced against the ambient pressure (P1) and being arranged to the container (2) and about a valve axis (14) onto the partition wall (6, 106, 206) and through the wall opening (8, 108, 208), and the membrane (12, 112, 212) having an axial extent, thereby forming a sleeve-like body, whereby the membrane (12, 112, 212) consists of an attachment end (12a, 112a, 212) fixedly connected to the partition wall (6, 106, 206), and a movable manoeuvring end (12b, 112b, 212b) placed at an axial distance from the attachment end (12a, 112a, 212a), and the manoeuvring end (12b, 112b, 212b) being arranged in a tensile-force-transmitting manner to said axially movable sealing member (22, 122, 222);~~

~~- wherein the sleeve-like membrane (12, 112, 212), when in its inactive position, is~~
~~being arranged with a maximum axial longitudinal extent when at rest in its inactive position, and that;~~

~~- wherein the membrane (12, 112, 212) is radially flexible and therefore able to deflect in a radial direction relative to said valve axis~~
~~deflectable; and also~~

~~- wherein the membrane is arranged in a manner inhibiting axial stretching causing it to be, whereby the membrane (12, 112, 212) is insignificantly extendable axially in said axial direction~~
~~its longitudinal extent when subjected to said differential pressure, which generates a tensile force in the membrane causing the membrane to contract axially and assume an active position, thereby causing a valve-opening, axial movement of the valve sealing member~~
~~tensile loads caused by a differential pressure force acting on the membrane (12, 112, 212).~~

Claim 2 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the ~~manoeuvring~~maneuvering end ~~(12b, 112b, 212b)~~ is connected to a separate valve~~the sealing member (22, 122, 222)~~.

Claim 3 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the valve sealing member forms an extension of the maneuvering end~~an extension of the manoeuvring end (12b, 112b, 212b)~~ is formed as the sealing member ~~(22, 122, 222)~~.

Claim 4 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the membrane ~~(12, 112, 212)~~ is of a cylindrical shape.

Claim 5 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the membrane ~~(12, 112)~~ is of a conical shape.

Claim 6 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the membrane ~~(212)~~ is provided with a cylindrical membrane portion proximate its attachment end and a conical membrane portion proximate its maneuvering end~~of a partly cylindrical and partly conical shape~~.

Claim 7 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the membrane ~~(12)~~ is radially deflectable outwards from the valve axis ~~(14)~~.

Claim 8 (currently amended): The device according to claim 7, ~~characterized in that~~wherein a mid portion of the membrane ~~(12)~~ is shaped as an axially extending longitudinal bellows having axially extending folds ~~(36)~~.

Claim 9 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the membrane ~~(112, 212)~~ is radially deflectable inwards towards the valve axis ~~(14)~~.

Claim 10 (currently amended): The device according to claim 9, ~~characterized in that~~wherein the membrane ~~(212)~~ is provided with at least one or more peripheral bracing rings ~~ring disposed (264) spaced apart~~ between the attachment end ~~(212a)~~ and the ~~manoeuvring~~maneuvering end ~~(212b)~~ of the membrane ~~(212)~~, whereby the membrane ~~(212)~~, upon activation, assumes a ~~desired~~ deflection profile determined by the at least one bracing ring upon activation.

Claim 11 (currently amended): The device according to claim 9, ~~characterized in that~~wherein the membrane ~~(112, 212)~~ is arranged with ~~one or more~~ buckle locators in the form of axially extending corrugations or folds capable of yielding a certain resistance to radial deflection~~that localize desired deflection regions~~ of the membrane ~~(112, 212)~~, whereby the membrane ~~(112, 212)~~, upon activation, assumes a ~~desired~~ deflection profile determined by the axial corrugations or folds upon activation.

Claim 12 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the membrane ~~(12, 112, 212)~~ is braced axially for it to yield a certain resistance to radial deflection, whereby the membrane ~~(12, 112, 212)~~, when inactive, exerts a firm closing force on the valve sealing member ~~(22, 122, 222)~~ ~~when the membrane (12, 112, 212) is at rest in its inactive position~~.

Claim 13 (currently amended): The device according to claim 12, ~~characterized in that~~wherein the membrane ~~(12, 112, 212)~~ is provided with one or more axial braces.

Claim 14 (currently amended): The device according to claim 12, ~~characterized in that~~wherein the membrane-(12, 112, 212), when viewed in cross-section, is arranged into a hexagonal shape, star shape or wave shape, which has an axially bracing effect.

Claim 15 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the membrane-(12, 112, 212) is formed asymmetrically about the valve axis (14).

Claim 16 (cancelled)

Claim 17 (currently amended): The device according to claim 1, ~~characterized in that~~wherein the valve sealing member-(22, 122, 222) and an edge of the wall opening-(8, 108, 208) are connected via a breakable seal capable of being~~that is~~ broken upon first-time movement of the sealing member-(22, 122, 222).

Claim 18 (currently amended): The device according to claim 10, ~~characterized in that~~wherein the membrane-(112, 212) is arranged with ~~one or more~~ buckle locators in the form of axially extending corrugations or folds capable of yielding a certain resistance to radical deflection~~that localize desired deflection regions~~ of the membrane-(112, 212), whereby the membrane-(112, 212), upon activation, assumes a ~~desired~~ deflection profile determined by the axial corrugations or folds~~upon activation~~.

Claim 19 (currently amended): The device according to claim 7, ~~characterized in that~~wherein the membrane-(12, 112, 212) is braced axially for it to yield a certain resistance to radial deflection, whereby the membrane-(12, 112, 212), when inactive, exerts a firm closing force on the valve sealing member-(22, 122, 222) ~~when the membrane (12, 112, 212) is at rest in its inactive position~~.

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Claim 20 (currently amended): The device according to claim 9, ~~characterized in that~~wherein the membrane ~~(12, 112, 212)~~ is braced axially for it to yield a certain resistance to radial deflection, whereby the membrane ~~(12, 112, 212)~~, when inactive, exerts a firm closing force on the valve sealing member ~~(22, 122, 222)~~ ~~when the membrane (12, 112, 212) is at rest in its inactive position.~~